LIST OF CURRENT CLAIMS

1. (Currently Amended) A ~~coding~~ composition for forming a coding, the composition comprising at least one pair of mutually associated luminescent substances, said at least one pair including first and second luminescent substances which emit in a joint emission range located outside the visible spectral range, the emission spectra of the first and second luminescent substances overlapping in at least a subrange of said joint emission range such that the emission spectrum of the first luminescent substance is complemented characteristically by the emission spectrum of the second luminescent substance to define an envelope of luminescence emissions usable as a coding.

2. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein said joint emission range extends in a range ~~selected from the group consisting~~ of from about 750 nm to about 2500 nm~~; from about 800 nm to about 2200 nm; and from about 1000 nm to about 1700 nm~~.

3. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein at least one of the first and second luminescent substance is formed on the basis of a doped host lattice.

4. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein at least one of the first and second luminescent substance is formed on the basis of a host lattice doped with rare earth elements.

5. (Currently Amended) The ~~coding~~ composition according to claim 4, wherein the host lattice is doped with one or more of dopants selected from the group consisting of neodymium, erbium, holmium, thulium, ytterbium, praseodymium, and dysprosium.

6. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein at least one of the first and second luminescent substance is formed on the basis of a host lattice doped with a chromophore, the chromophore being selected from the group consisting of scandium, titanium, vanadium, chromium, manganese, iron, cobalt, nickel, copper and zinc.

7. (Currently Amended) The ~~coding~~ composition according to claim 6, wherein at least one of the host lattices is doped with a plurality of chromophores.

8. (Currently Amended) The ~~coding~~ composition according to claim 3, wherein at least one of the host lattices is formed by a mixed crystal.

9. (Currently Amended) The ~~coding~~ composition according to claim 3, wherein the first and second luminescent substances are formed on the basis of different host lattices which have crystal fields of different strength and which are each doped with the same dopant.

10. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap has a width of 200 nm or less.

11. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range ~~selected from the group consisting~~ of from about 850 nm to about 970 nm~~; from about 920 nm to about 1060 nm; from about 1040 nm to about 1140 nm; from about 1100 nm to about 1400 nm; from about 1100 nm to about 1250 nm; from about 1120 nm to about 1220 nm; from about 1300 nm to about 1500 nm; and from about 1400 nm to about 1700 nm~~.

12. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the first and second luminescent substances have in said subrange at least one emission line in each case whose positions have a distance apart of about 30 nm or less.

13. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the coding contains a third luminescent substance which has at least one emission line outside said subrange.

14. (Currently Amended) The ~~coding~~ composition according to claim 13, wherein the at least one emission line is outside the visible spectral range.

15. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the coding system includes a plurality of pairs of said mutually associated luminescent substances.

16. (Currently Amended) The ~~coding~~ composition according to claim 15, wherein the subranges where the emission spectra of the first and second luminescent substances of a pair overlap each other complementarily are different for different pairs of mutually associated luminescent substances.

17. (Currently Amended) The ~~coding~~ composition according to claim 1, wherein the coding has at least a third luminescent substance which likewise emits in said subrange, and the emission spectrum of the first and third luminescent substance is complemented characteristically.

18. (Currently Amended) A value document comprising a ~~coding system~~ composition, forming a coding and comprising at least one pair of mutually associated luminescent substances, said at least one pair including first and second luminescent substances which emit in a joint emission range located outside the visible spectral range, the emission spectrum of the first and second luminescent substances overlapping in at least a subrange of the said joint emission range such that the emission spectrum of the first luminescent substance is complemented characteristically by the emission spectrum of the second luminescent substance.

19. (Currently Amended) The value document according to claim 18, said ~~coding system~~ composition comprising at least two pairs of said mutually associated luminous substances.

20. (New) The composition according to claim 1, wherein said joint emission range extends in a range of from about 800 nm to about 2200 nm.

21. (New) The composition according to claim 1, wherein said joint emission range extends in a range of from about 1000 nm to about 1700 nm.

22. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 920 nm to about 1060 nm.

23. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1040 nm to about 1140 nm.

24. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1100 nm to about 1400 nm.

25. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1100 nm to about 1250 nm.

26. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1120 nm to about 1220 nm.

27. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1300 nm to about 1500 nm.

28. (New) The composition according to claim 1, wherein the subrange where the emission spectra of the first and second luminescent substances complementarily overlap extends in a range of from about 1400 nm to about 1700 nm.